

REMARKS

Claims 1-3, 5, 8-9, and 12-15 are pending. Claims 4, 6-7, 10-11, and 16 were previously cancelled. Claim 1 and 9 are amended herein. Support for the amendments can be found throughout the written description, claims, and drawings as originally filed. Therefore, no new matter has been added. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 103

Claims 1, 5 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 6,396,824 ("Schilling") in view of U.S. Pat. Pub. No. 2001/0020216 ("Lin") and U.S. Pat. No. 3,740,671 ("Crow et al.").

In particular the Examiner suggests that Crow teaches a carrier tracking processing is performed using an open-loop device and that it would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Schilling, and to including that the carrier tracking processing is performed using an open-loop device, as taught by Crow, thus allowing for reducing implementation cost.

Claim 2 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Schilling in view of Lin and U.S. Patent No. 3,740,671 ("Crow et al.") and further in view of U.S. Pat. No. 5,943,248 ("Clapp").

Claims 3 and 8 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Schilling in view of Lin and further in view of U.S. Pat. No. 3,568,066 ("Fujimura").

Claims 12-13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Schilling in view of Lin and Crow et al. and further in view of U.S. Pat. No. 7,183,971 ("Lloyd").

Claim 14 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Schilling in view of Lin, Crow et al. and Lloyd and further in view of U.S. Pat. No. 6,538,599 ("David").

Claim 15 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Schilling in view of Lin and Crow et al. and further in view of U.S. Pat. No. 6,470,044 ("Kowalski").

As the Examiner is well aware, In order to establish a case of obviousness, there must be an apparent reason by which a skilled artisan would combine prior art references, as set forth by *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1734, 82 USPQ2d 1385, 1391 (2007) (An obviousness inquiry includes determining "whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue."). The basis for the combination may be found in the references themselves or in the general knowledge in the art; however, the apparent reason to combine or modify the references should be made explicit in order to facilitate review. *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. at 1740-41, 82 USPQ2d at 1396; and see *In re Kahn*, 441 F3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) ("[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning to support the legal conclusion of obviousness.").

The foregoing rejections are respectfully traversed.

Applicant has amended claims 1 and 9 for clarification. In view of the amendments presented, Applicant suggests that the objections have been rendered moot.

Applicant also respectfully disagrees with the Examiner's contention that the feature "code/carrier tracking processing is performed using an open-loop device" is known by Crow et al. Applicant respectfully submits that Crow et al. discloses a third-order phase-locked loop filter with an open-loop transfer function (Abstract). Applicant's specification at page 10, first paragraph, discloses that the DLL loop is of zero order and the FLL loop filter is typically of first or second order.

For a person skilled in the art, the teachings of a third-order filter cannot be applicable to a first or second order filter. Indeed, Crow et al. discloses in the "Background" section that the second-order filter experienced problems with a Doppler rate profile (col. 1, line 34-37). To overcome the problem, Crow et al. considers that third-order filter is the solution (col. 1, line 62-65 and col. 2, line 27-31). Consequently, Crow et al proposes the use of a third-order filter with an open-loop transfer function. Therefore, not only does Crow et al. not teach the claimed invention, but Crow et al. teaches away from the presently claimed solution.

Reconsideration is respectfully requested.

For at least the above reasons, Applicant respectfully asserts that claim 1 should be allowable. Independent claim 9 includes similar limitations and should therefore be allowable for at least similar reasons. The remaining claims depend from claim 1 or claim 9 and should therefore be allowable as well.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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